# TECHNICAL REVIEW AND EVALUATION OF APPLICATION FOR AIR QUALITY PERMIT NO. 66279

Safford Valley Cotton Growers Cooperative Inc.

#### I. INTRODUCTION

This Class II air quality permit is issued to Safford Valley Cotton Growers Cooperative, Inc., the Permittee, for the continued operation of its cotton ginning facility located at 120 E. 9<sup>th</sup> Street, Safford, AZ 85546.

## **A.** Company Information

1. Facility Name: Safford Valley Cotton Growers Cooperative, Inc.

2. Facility Location: 120 E. 9<sup>th</sup> Street, Safford, AZ 85546

3. Mailing Address: 120 E. 9<sup>th</sup> Street, Safford, AZ 85546

#### **B.** Attainment Classification

The facility is located in attainment/unclassified area for criteria pollutants.

#### II. PROCESS DESCRIPTION

The facility is a stationary cotton ginning plant, consisting of two gins one long staple gin, and one short staple gin. The short staple gin has a processing capacity of 9,000 pounds of lint per hour and the long staple gin has the capacity to produce 6,000 pounds of lint per hour. This brings the total capacity of both gins to be 15,000 pounds of lint per hour. The facility has eight (8) natural gas fired heaters, each 3.0 MMBtu/hour. The facility processes the seed cotton for producing short-staple and long-staple cotton in each of the two respective gins. The various steps involved in the process are the transportation and feeder system, drying and cleaning systems, two gin lines followed by lint cleaning and pressing systems, and the trash system. The emission control is through the various cyclones. Discharge from all the cyclones is discharged into a dust house.



# III. EMISSIONS

**Table 1: Potential Emissions** 

Pollutant	Emissions* (tons per year)
	(tolls per year)
PM	35.11
$\mathrm{PM}_{10}$	11.74
$\mathbf{PM}_{2.5}$	11.74
NO <sub>x</sub>	2.58
СО	2.16
SO <sub>2</sub>	0.02
voc	0.14
HAPs	0.05

<sup>\*</sup> Calculations are based on seasonal operation during the cotton harvesting season.

# IV. APPLICABLE REGULATIONS

Table 2 displays the applicable requirements for each permitted piece of equipment along with an explanation of why the requirement is applicable.

**Table 2: Verification of Applicable Regulations** 

Unit	Control	Rule	Discussion
	Device		
Cotton Gin Facility	Cyclones	A.A.C.	This standard is applicable to
		R18-2-729	all cotton gins.
Dryers/Heaters	None	A.A.C.	This standard is applicable to
		R18-2-702.B	both dryers and all heaters.
		R18-2-702.C	
		R18-2-730.D	
·		R18-2-730.G	
		R18-2-730.A.1.a	
		R18-2-730.B	
		R18-2-730.A.3	
		R18-2-730.A.2	
Fugitive dust sources	Water Trucks	A.A.C. R18-2 Article 6	These standards are applicable
	Dust	A.A.C. R18-2-702	to all fugitive dust sources at
	Suppressants		the facility.



Unit	Control Device	Rule	Discussion
Abrasive Blasting	Wet blasting; Dust collecting equipment; Other approved methods	A.A.C. R-18-2-702 A.A.C. R-18-2-726	These standards are applicable to any abrasive blasting operation.
Spray Painting	Enclosures	A.A.C. R18-2-702 A.A.C. R-18-2-727	This standard is applicable to any spray painting operation.
Demolition/renovation operations	N/A	A.A.C. R18-2-1101.A.8	This standard is applicable to any asbestos related demolition or renovation operations.
Mobile sources	None	A.A.C. R18-2-801	These are applicable to off- road mobile sources, which either move while emitting air pollutants or are frequently moved during the course of their utilization.

# V. PREVIOUS PERMIT CONDITIONS

Permit No. 56239 was issued on March 11, 2013, for the continued operation of this facility. Table 3 below illustrates if a section in Permit No. 66279 was revised or deleted.

Table 3: Permit No. 66279

Section No.	Determination		Comments
	Revised	Delete	
Att. A.	X		General Provisions - Revised to represent most recent template language.
Att. B. Condition III	X		Natural gas heater requirements were added.

# VI. MONITORING REQUIREMENTS

# A. Facility Wide

- 1. At the frequency specified in the following sections of this permit, the Permittee shall conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources.
- 2. If the plume on an instantaneous basis appears less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.
- 3. If the plume on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the plume:



- a. If the six-minute observation of the plume is less than or equal to the applicable opacity standard, then the Permittee shall record the name of the observer, the date on which the six-minute observation was made, and the results of the six-minute observation.
- b. If the six-minute observation of the plume is greater than the applicable opacity standard, then the Permittee shall do the following:
  - (1) Adjust or repair the controls or equipment to reduce opacity to less than or equal to the opacity standard;
  - (2) Record the name of the observer, the date on which the six-minute observation was made, the results of the six-minute observation, and all corrective action taken; and
  - (3) Report the event as an excess emission for opacity in accordance with Condition XII.A of Attachment "A".
  - (4) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.

#### **B.** Cotton Gin

The Permittee shall conduct a monthly monitoring of visible emissions from the visible emissions as per the opacity monitoring requirements specified in Condition I.A.1 of Attachment "B" of the permit.

# C. Dryers/Heaters

The Permittee shall conduct a monthly monitoring of visible emissions from the visible emissions as per the opacity monitoring requirements specified in Condition I.A.1 of Attachment "B" of the permit.

# **D.** Fugitive Dust

- 1. The Permittee is required to keep record of the dates and types of dust control measures employed.
- 2. The Permittee is required to show compliance with the opacity standards by performing monthly survey of visible emission from fugitive dust sources in accordance with Condition I.A.1 of Attachment "B" of the permit.
- 3. The Permittee is required to keep records of the name of the observer, the time, date, and location of the observation and the results of all surveys and observations.
- 4. The Permittee is required to keep records of any corrective action taken to lower the opacity of any emission point and any excess emission reports.

## **E.** Periodic Activities

1. The Permittee is required to record the date, duration and pollution control measures of any abrasive blasting project.



- 2. The Permittee is required to record the date, duration, quantity of paint used, any applicable MSDS, and pollution control measures of any spray painting project.
- 3. The Permittee is required to maintain records of all asbestos related demolition or renovation projects. The required records include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

# F. Mobile Sources

The Permittee is required to keep records of all emission related maintenance performed on the mobile sources.

## VII. LIST OF ABBREVIATIONS

A.A.C	
ADEQ	Arizona Department of Environmental Quality
AQD	Air Quality Division
CO	Carbon Monoxide
EPA	Environmental Protection Agency
	Hazardous Air Pollutants
hr	
	Pound
	National Emission Standards for Hazardous Air Pollutant
NOC	
NOx	Nitrogen Oxides
	Particulate Matter
	Particulate Matter Nominally less than 2.5 Micrometers
	Potential-to-Emit
SO2	Sulfur Dioxide
TPY	Tons per Year
VOC	Volatile Organic Compound
yr	Year